

## CLAIMS:

1. A plasma picture screen provided with a front plate (1) comprising a glass plate (3) to which a dielectric layer (4), a UV-reflecting layer (8), and a protective layer (5) are applied, with a back plate (2) provided with a phosphor layer (10), with a ribbed structure (13) subdividing the space between the front plate (1) and the back plate (2) into plasma cells which are filled with a gas, and with one or more electrode arrays (6, 7, 11) on the front plate (1) and the back plate (2) for generating corona discharges in the plasma cells, wherein UV light with a wavelength of > 172 nm is produced by said discharges.

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2. A plasma picture screen as claimed in claim 1, characterized in that UV light with a wavelength of between 200 and 350 nm is produced in the corona discharges.

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3. A plasma picture screen as claimed in claim 1, characterized in that the gas is selected from the group comprising mercury vapor, Ne/N<sub>2</sub>, and the halides of rare gases.

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4. A plasma picture screen as claimed in claim 1, characterized in that the UV-reflecting layer (8) comprises a material selected from the group comprising metal oxides, metal fluorides, metal phosphates, metal polyphosphates, metal metaphosphates, metal borates, and diamond.

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5. A plasma picture screen as claimed in claim 1, characterized in that the UV-reflecting layer (8) contains particles with a particle diameter of less than 300 nm.

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6. A plasma picture screen as claimed in claim 4, characterized in that the UV-reflecting layer (8) contains particles with a particle diameter of between 20 nm and 150 nm,

7. A plasma picture screen as claimed in claim 1, characterized in that the UV-reflecting layer (8) has a thickness of 0.5  $\mu$ m to 5  $\mu$ m.